

CLAIMS

1. A method for the manufacture of a spun fibre from a fibre bundle, the fibres of which are subjected to a rotating air flow and as a result are rotated in an intake mouth (35) of a yarn channel (45) of a spindle (32) to form a thread, whereby the fibres are predominantly divided into at least two fibre bundles, each of which is conveyed under predetermined processing features between a fibre delivery point (P, K, K.1) and the spindle intake mouth (35), characterised in that the processing features are capable of being adapted in such a way that an influence can in this way be exerted on the structure of the thread.
2. A method according to claim 1, characterised in that at least one of the following processing features is provided for:
 - Different duration of conveying
 - Different impingement angle of the fibres to the middle line of the yarn channel
 - Different speeds of the fibres during conveying
 - Different positions of the fibres at the end of the conveying

and that, in addition, at least one of the following adaptations of the processing features is provided for:

- a) Difference conveying distances
- b) Different conveying directions, relative to the middle line of the yarn channel
- c) Different average conveying air speeds

- d) Acceleration and/or deceleration of the fibres during conveying by air
 - e) Use of long staple fibres
 - f) Use of short staple fibres
 - f1) Use of natural fibres
 - f2) Use of artificial fibres
 - g) Use of synthetic endless fibres.
3. A method according to claim 2, characterised in that at least two fibre bundles with different middle fibre lengths are fed in, and that shorter fibres tend to be predetermined to be conducted in the shorter conveying distances.
4. A method according to claim 2, characterised in that the channels with shorter fibres tend to feature a smaller impingement angle (α , β) than longer fibres.
5. A method according to claim 2, characterised in that, with the use of artificial fibres and natural fibres, the artificial fibres are guided as core yarn fibres with a shorter conveying length than the natural fibres.
6. A device for the manufacture of a spun thread from a fibre bundle, in which the fibres are subjected to a rotating air flow in a nozzle block (20) with one or more nozzles (21), and as a result are rotated in an intake mouth (35) of a yarn channel (45) of a spindle (32) to form a thread, whereby the fibres are predominantly conducted to the nozzle block through one fibre conveying channel (8) each to guiding the fibres of a separate fibre bundle in each case, each under predetermined device features between a fibre discharge point (P,K,K.1) and the spindle intake mouth (35), characterised in that the device features are capable of

being adapted by corresponding measures in such a way that an influence can as a result be exerted on the structure of the fibre.

7. A device according to claim 1, characterised in that at least one of the following device features is provided for:
- Different conveying lengths per fibre conveying channel
 - Different impingement angles (α , β) of the fibres to the middle line of the yarn channel
 - Different speeds of the fibres in the conveying channel
 - Different positions of the fibres at the outlet end of the fibre conveying channel

and that also at least one of the following measures is provided for in order to adapt to the device features:

- a) Different channel lengths due to different bends in the individual conveying channels
- b) Different directions of the outlet mouths, relative to the middle line of the yarn channel, of the individual conveying channels
- c) Different channel cross-sections of the individual channels
- d) Channel cross-section of such a nature that the fibres are increasingly speeded up or increasingly slowed down
- e) Use of long staple fibres

f) Use of short staple fibres

f1) Use of natural fibres

f2) Use of artificial fibres

g) Use of synthetic endless fibres.

8. A device according to claim 7, characterised in that the channel cross-section is reduced in size towards the end of the channel, and, as a result, the fibres are speeded up and therefore stretched.
9. A device according to claim 7, characterised in that the channel cross-section is widened towards the end of the channel and, as a result, the fibres are slowed down and therefore have a tendency to adopt a transverse position or heeling position in the channel.
10. A device according to claim 7, characterised in that at least two fibre bundles with differing fibre lengths are fed in, and that the channels provided with shorter conveying lengths tend to conduct shorter fibres.
11. A device according to claim 10, characterised in that the channels with shorter fibres tend to feature a smaller impingement angle than channels with longer fibres.
12. A device according to claim 7, characterised in that, with the use of artificial fibres and natural fibres, the artificial fibres as core fibres are conducted in a channel with shorter conveying length than the natural fibres.
13. A device according to claim 7, characterised in that, as additional media, a driven tension roller (43) is provided, with a longitudinal area (43.1) with smaller roller diameter than a longitudinal area (43.2) arranged next to it, whereby the

longitudinal area (43.2) with greater diameter than the first longitudinal area (43.1) is in contact with the entire circumference on the bottom of the fibre conveying channel, and in this situation forms a fibre discharge point, also referred to as the clamping line (K.1).

14. A device according to claim 13, characterised in that the tension roller (43) is capable of being driven in such a way that the circumference of the longitudinal area (43.2) in contact with the said channel bottom is capable of being driven at a circumferential speed which accords with the fibre delivery speed into the fibre conveying channel.

1002333-1002333